# East Central University/Murray State College Articulation Agreement

## **Bachelor of Science: Physics**

#### Catalog Year 2017-2018

Associate of Science—Chemistry (Physics)				Bachelor of Science—Physics		
	COL 1211 Academic Success			PHYS 3813 Optics		
	ENG 1113 English Comp I			PHYS 3013 Modern Physics		
	HST 1483 U.S. History to 1865 OR			PHYS 4113 Electricity & Magnetism—Field Theory		
_	HST 1493 U.S. History since 1865			MATH 3025 Calculus & Analytic Geometry II		
	MTH 1513 College Algebra*			—3 Minor or Elective	15	
<u> </u> _	MTH 1613 Plane Trigonometry*	4-	-			
<u> </u>	BIO 1114 Principals of Biology	17				
<u> </u>	ENG 1213 English Comp II			PHYS 3113 Mechanics I		
╏□	MTH 2215 Calculus I w/ Analytic Geometry*			PHYS 3412 Junior Physics Laboratory		
╏□	BOT 1114 General Botany <b>OR</b> ZOO 1114 General Zoology			MATH 4113 Differential Equations		
	CS 1613 Programming I*			—3 Minor or Elective		
	HWP 1112 Personal Health	17		—3 Minor or Elective		
				—2 Elective	15	
	PHY 2015 Engineering Physics I*		_	PHYS 4513 Quantum Mechanics	_	
	CHM 1114 Gen Chemistry I*					
	SPC 1113 Fundamentals of Speech			—2 Required Physics Elective 3000-4000 Level		
	PSY 1113 Intro to Psychology <b>OR</b>		  -	MATH 3033 Calculus & Analytic Geometry III  —3 Upper Level Minor or Elective		
_	SOC 1113 Intro to Sociology	40	_  _	—3 Upper Level Minor or Elective	15	
╏╚	—-3 Cultural & Global Education	18	<u></u>		-	
	PHY 2115 Engineering Physics II*		<u> </u>	PHYS 4313 Intro to Nuclear Physics		
	CHM 1214 General Chemistry II*		╏	PHYS 3713 Thermodynamics		
	GVT 1113 American Federal Government			—3 Upper Level Minor or Elective		
		15	╏□	—3 Minor or Elective		
_	—-3 Cultural & Global Education	15	$\begin{bmatrix} \Box \\ - \end{bmatrix}$	—3 Minor or Elective	15	
Total Credit Hours 67		67	Tot	al Credit Hours	60	
	* please see chart on second page for course equivalencies			ECU:		

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#### **Course Equivalency Table**

Murray State College	East Central University
CHM 1114 Gen Chemistry I	CHEM 1114 General Chemistry I
CHM 1214 Gen Chemistry II	CHEM 1214 General Chemistry II
MTH 1513 College Algebra	MATH 1513 College Algebra
MTH 1613 Plane Trigonometry	MATH 1713 Trigonometry
MTH 2215 Calculus I w/ Analytic Geometry	MATH 2825 Calculus and Analytic Geometry I
CS 1613 Programming I	CMPSC 1113 Computer Programming I
PHY 2015 Engineering Physics I	PHYS 2115 Engineering Physics I
PHY 2115 Engineering Physics II	PHYS 2225 Engineering Physics II

Articulated using MSC's A. S in Chemistry (Physics).

General Education equivalencies can be found by referring to either the Oklahoma State Regents Transfer Matrix or the ECU Transfer Matrix. Both matrices can be found at www.ecok.edu by clicking on *Academics* and scrolling down to *Course Transfer Matrix*.

Articulated without a minor. A minor is not required, please see an advisor for appropriate courses.

\*\*Will transfer as course content but not for upper level credit: Student should meet with an ECU advisor for more information.

#### **NOTES:**

A student transferring with an Associate degree in Arts or Science from MSC fulfills ECU's general education requirement by transferring his or her credit to East Central University. Transferring credit for general education does not eliminate or otherwise affect any of the following ECU requirements: (1) prerequisites; (2) specific requirements in majors, minors or related work in these areas; or (3) the requirements for teacher certification.

A student must earn at least 40 semester hours in upper-division courses (numbered 3000 or higher). A course taught at MSC may equate in content to an ECU 3000-4000 level course, but it will not be counted as part of the 40 hours of upper level courses.

A student must earn at least 60 semester hours, excluding physical activity courses, at a baccalaureate degree granting institution.